CLAIMS:

1. An oxygen-peroxyl competing bleaching composition for use in an aqueous wash medium for bleaching a substrate, the oxygen-peroxyl competing bleaching composition comprising:

(i) an organic substance which forms a complex with a transition metal, the complex for catalysing bleaching of the substrate by atmospheric oxygen in the aqueous medium; and,

(ii) a peroxyl bleaching agent selected from the group consisting of: a peroxyl species and a peroxyl species precursor, for bleaching the substrate in the aqueous medium,

wherein application of a unit dose of the oxygen-peroxyl competing bleaching composition to an aqueous medium provides a concentration of peroxyl species that permits dual bleaching during a wash.

2. An oxygen-peroxyl competing bleaching composition according to claim 1, wherein the peroxyl bleaching agent is in the form of a time release peroxyl bleaching agent that is releaced during the wash.

3. An oxygen-peroxyl competing bleaching composition according to claim 2, wherein said time release bleaching agent comprises a slowly dissolving solid.

4. An oxygen-peroxyl competing bleaching composition according to claim 2, wherein said time release peroxyl bleaching agent comprises an encapsulated peroxyl bleaching

agent, wherein the encapsulation is removed under wash conditions.

5. An oxygen-peroxyl competing bleaching composition according to claim 1, comprising a time release agent for decomposing the hydrogen peroxide in an aqueous medium during a wash cycle, wherein the peroxyl bleaching agent is selected from hydrogen peroxide or a hydrogen peroxide precursor.

6. An oxygen-peroxyl competing bleaching composition according to claim 1, wherein application of the unit dose of the oxygen-peroxyl competing bleaching composition to an aqueous medium provides a concentration of peroxyl species of below 2.0 mM in the wash.

7. An oxygen-peroxyl competing bleaching composition according to claim 1, wherein application of the unit dose of the oxygen-peroxyl competing bleaching composition to an aqueous medium provides a concentration of peroxyl species of at least 0.02 mM in the wash.

8. An oxygen-peroxyl competing bleaching composition according to claim 1, comprising a peroxy acid precursor for producing a peroxy acid from hydrogen peroxide.

9. An oxygen-peroxyl competing bleaching composition according to claim 1, comprising a source of oxygen.

10. An oxygen-peroxyl competing bleaching composition according to claim 1, comprising a hydrogen peroxide depleting enzyme or transition-metal enzyme mimic.

11. An oxygen-peroxyl competing bleaching composition according to claim 1, wherein the peroxyl species precursor is selected from: an alkali metal perborate and an alkali metal percarbonate.

12. An oxygen-peroxyl competing bleaching composition according to claim 1 wherein a unit dose provides a peroxyl species in the wash of below 2.0 mM to at least 0.02 mM in the wash.

13. An oxygen-peroxyl competing bleaching composition according to claim 1, comprising a peracid depleting transition metal complex.

14. An commercial package comprising an oxygen-peroxyl competing bleaching composition according to claim 1, together with instructions for dual bleaching.

15. A method of bleaching a substrate in an aqueous solution during a wash which comprises the steps of:

providing a concentration of a peroxyl species in the aqueous solution for bleaching tea type stains optionally with a transition metal catalyst that further activates hydrogen peroxide;

providing an amount of oxygen bleaching catalyst to the wash together with oxygen dissolved in the aqueous solution;

reducing the concentration of peroxyl species in the aqueous solution for increasing the amount of oxygen bleaching catalyst available for oxygen bleaching in the wash.

16. A method of bleaching a substrate in an aqueous solution according to claim 15, wherein in the aqueous medium the [oxygen species-complex]/ [peroxyl species-complex] is between 10 and 0.1 at a point in time during the wash.

17. A method of bleaching a substrate in an aqueous solution according to claim 15, wherein in the aqueous medium the $[O_2]$/[total peroxyl present] is in the range 10 and 0.1 at a point in time during the wash.

17. A method of bleaching a substrate in an aqueous solution according to claim 15, wherein that wash is at a temperature of between 10 °C and 45 °C.